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| APPLICATION NO | . FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|--------------------|-----------------------|---------------------|------------------|--|
| 10/652,323 | 08/29/2003 | Deirdre H. Elqaq | 30320/P15128 | 1631 | |
| 4743 | 7590 10/27/2006 | | EXAMINER . | | |
| | LL, GERSTEIN & BOR | ANGEBRANNDT, MARTIN J | | | |
| 233 S. WACKER DRIVE, SUITE 6300 SEARS TOWER | | | ART UNIT | PAPER NUMBER | |
| CHICAGO, IL 60606 | | | 1756 | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

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Advisory Action Before the Filing of an Appeal Brief

| Application No. | Applicant(s) | |
|-----------------------|--------------|--|
| 10/652,323 | ELQAQ ET AL. | |
| Examiner | Art Unit | |
| Martin J. Angebranndt | 1756 | |

| | Martin J. Angebranndt | 1756 | |
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| The MAILING DATE of this communication appe | ars on the cover sheet with the c | orrespondence add | ress |
| THE REPLY FILED 11 October 2006 FAILS TO PLACE THIS A | APPLICATION IN CONDITION FOR | R ALLOWANCE. | |
| 1. The reply was filed after a final rejection, but prior to or on this application, applicant must timely file one of the follow places the application in condition for allowance; (2) a No a Request for Continued Examination (RCE) in compliant time periods: | ving replies: (1) an amendment, aff tice of Appeal (with appeal fee) in c | idavit, or other evider compliance with 37 C | nce, which FR 41.31; or (3) |
| a) \square The period for reply expires 3 months from the mailing date | of the final rejection. | | |
| b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire to Examiner Note: If box 1 is checked, check either box (a) or TWO MONTHS OF THE FINAL REJECTION. See MPEP 7 | ater than SIX MONTHS from the mailing (b). ONLY CHECK BOX (b) WHEN THE 06.07(f). | g date of the final rejecti E FIRST REPLY WAS F | on. ILED WITHIN |
| Extensions of time may be obtained under 37 CFR 1.136(a). The date have been filed is the date for purposes of determining the period of ex under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b) NOTICE OF APPEAL | tension and the corresponding amount shortened statutory period for reply origi than three months after the mailing da | of the fee. The appropr inally set in the final Offi | iate extension fee ce action; or (2) as |
| The Notice of Appeal was filed on A brief in comp filing the Notice of Appeal (37 CFR 41.37(a)), or any exte a Notice of Appeal has been filed, any reply must be filed AMENDMENTS | nsion thereof (37 CFR 41.37(e)), to | avoid dismissal of th | ns of the date of se appeal. Since |
| 3. The proposed amendment(s) filed after a final rejection, | but prior to the date of filing a brief. | will not be entered b | ecause |
| (a) They raise new issues that would require further co | | | |
| (b) ☐ They raise the issue of new matter (see NOTE below) (c) ☐ They are not deemed to place the application in beauting appeal; and/or | | ducing or simplifying | the issues for |
| (d) ☐ They present additional claims without canceling a | corresponding number of finally rej | ected claims. | |
| NOTE: (See 37 CFR 1.116 and 41.33(a)). | | | |
| 4. The amendments are not in compliance with 37 CFR 1.1 | | mpliant Amendment | (PTOL-324). |
| 5. Applicant's reply has overcome the following rejection(s) | | timely filed amonday | nt annaalina tha |
| Newly proposed or amended claim(s) would be all non-allowable claim(s). | lowable if submitted in a separate, | timely filed amendme | ent canceling the |
| 7. For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is pro The status of the claim(s) is (or will be) as follows: Claim(s) allowed: <u>none</u> . Claim(s) chiested to page | | ll be entered and an e | explanation of |
| Claim(s) objected to: <u>none</u> . Claim(s) rejected: <u>1-18</u> . | | | |
| Claim(s) withdrawn from consideration: | • | | |
| AFFIDAVIT OR OTHER EVIDENCE | | | • |
| The affidavit or other evidence filed after a final action, bubecause applicant failed to provide a showing of good an was not earlier presented. See 37 CFR 1.116(e). | | | |
| The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to showing a good and sufficient reasons why it is necessar | overcome all rejections under appe | al and/or appellant fa | ils to provide a |
| 10. ☐ The affidavit or other evidence is entered. An explanatio REQUEST FOR RECONSIDERATION/OTHER | n of the status of the claims after e | ntry is below or attacl | ned. |
| The request for reconsideration has been considered bu <u>See Continuation Sheet.</u> | | condition for allowa | nce because: |
| 12. ☐ Note the attached Information Disclosure Statement(s).13. ☐ Other: | (PTO/SB/08) Paper No(s) | 4/4 | |
| , | | Martin J Angebrani Primary Examiner | ndt |

U.S. Patent and Trademark Office PTOL-303 (Rev. 08-06)

Continuation of 11, does NOT place the application in condition for allowance because: The applicant on page 3/10 states that the rejection is driven by hindsight. The examiner holds that the disclosure of disclosure of equivalence in the use of a mask and the actino of a phtooresist as a masking element is clearly established in the prior art as evidenced in the references applied (Kalbitzer et al. and Kusonoki et al.), who use the maskign elements to block ion beams, so the disclosure of equivalence is present and a reasonable expectation of success established. Further, the teaching away from the use of focussed ion beams is found in Kusoni et al. which casts that option in unfavorable light. The references teach ion beams of atoms, causing crystalline Silicon to an amorphous phase, so the fact situation in Graselli does not match well. The language of more than "about 30" in Kalbitzer et al. suggests a lack of criticality in the AU range to the reader and clearly, the ability of Si ion bombardment to cause the amorphozation is clear for the record. The applicant argues with respect to Strain and Kalnitsky, that the combination wouldnot be viewed as obvious by one of ordinary skill in the art, the examiner disagrees, noting that boththeh references are forming waveguiding regions where the ion implantation causes an increased refractive index to form the waveguildng layer. Botht eh use of Si, B, P and Ge are evidenced by the references to failcitate this providing a reasonable expecation of success. Further, when Kase et al., is read, the further doping described in claims 11 and 18 of the instant application, the use of the Si to preamorphize the layer is rendered obvious to one of ordinary skill in the art as the benefit of a more defined implantation profile is formed. The secondary references Koblinger etr al and Coronel are applied to show alternative modes for etching, to that described by Strain. The functional equivalence of the ion implantation established by the effect (amorphization of the silicon) for the Xe, Ge, B, P or Si. The applicant is invited to establish in a declaration unexpected results for the full scope of the process. This may be difficult for the case where both Si and at least one of B or P are implanted. The rejections stand.

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